



Alabama Community College System *Application for a New Instructional Program*

A. General Information:

1. Name of Institution: Shelton State Community College
2. Program Title: Automotive Service Technician Prefix: AUM
3. Date of Application Submission: 12/04/2015
4. Proposed Program Implementation Date: 07/08/2016
5. Degree Requested: AAS CER: AUM STC: AUM CIP Code: 47.0604
6. Marketing Name: Master Automotive Technician
7. Options (if any): Automotive Service Technician (CER) or Maintenance & Light Repair Technician (STC)
8. Location:

Campus	<u>Y</u>	Instructional Site	<u>N</u>
Off-Campus Site	<u>N</u>	Clinical/Industrial Site	<u>Y</u>
Agencies	<u>N</u>		
9. Interactive Distance Learning Delivery:

Substantial	Yes	%	Partial	Yes	%	No
				X	25%	

B. Institutional Contact:

John Speights Telephone 205-391-2431 E-mail jspeights@sheltonstate.edu
Program Director or Department Head

Dr. Joye Jones Telephone 205-391-2283 E-mail jjones1@sheltonstate.edu
Instructional Dean

Dr. Cynthia T. Anthony Telephone 205-391-2251 E-mail canthony@sheltonstate.edu

C. Program Objectives and Content

1. List objectives of the program as precisely as possible. The objectives should address specific needs the program will meet (institutional, societal, and employability) contiguous with expected learning outcomes and achievements. This is an extremely important part of the proposal. **Objectives must lend themselves to subsequent review and assessment of program accomplishments.**

Shelton State Community College currently has two certificate programs in place for Automotive Service Technology. They are located on the C. A. Fredd Campus of the college. The open enrollment AUM certificate program has been in place at this location since 1963 when it was known as Tuscaloosa State Technical College.

In 2012 Shelton State entered into a partnership with Mercedes Benz U.S. International to provide pre-employment automotive technical training for Mercedes production team member candidates. The scope of that initiative has expanded since 2012 to include post assembly line repair of vehicles that did not pass quality control standards at the end of the production process.

The proposed new instructional program is intended to provide an associate's degree option for students enrolled in both the general AUM program as well as the MBUSI System Skills Program. Program objectives are to:

- **Increase program enrollment and retention by offering an Associate of Applied Science degree that is more appealing to students when they are evaluating their career options.**
- **Establish multiple career pathways for students that will provide relevance and employment security in a global workforce.**
- **Provide graduates with the credentials currently considered by most industries as the minimum qualifications needed for entry level employment and opportunities for advancement within those organizations.**
- **Create a much needed pipeline of employees for local automotive manufacturers, dealerships, and independent repair facilities in Region 3 that are experiencing growth and attrition.**

2. How will this program be related to other programs at your institution?

Shelton State currently has certificate programs within the same occupational cluster that will remain in place to ensure that students have access to multiple career pathway options.

3. Identify any existing program, option, concentration, or track that this program will replace.

The proposed new instructional program will not replace any existing program.

4. Is it likely that this program will reduce enrollments in other programs at your institution? If so, please explain.

The proposed new instructional program will not reduce enrollment in other technical programs at Shelton State Community College. It is anticipated that the program will increase enrollments in the core courses that have been added in order to award the AAS. It is also anticipated that enrollments in this technical area will increase if the AAS is approved as an exit option.

5. List new courses that will be added to your curriculum specifically for this program. Indicate course number, title, and credit hour value for each course.

Academic Requirements

DDT 104 Basic CAD	3 hours
PSY 276 Human Relations	3 hours
Fine Arts Elective	3 hours

Technical Concentration:

AUM 127 Braking/Steering & Suspension Systems 3 Hours

This is a new course for the MBUSI option that combines the competencies from AUM 121 (Braking Systems) and AUM 122 (Steering & Suspension Systems), specific to the needs of MBUSI students.

AUM 235 Transmissions Drive Trains and Axles 3 Hours

This is a new course that combines the competencies in AUM 130 (Drive Trains and Axles) and AUM 230 (Automatic Transmissions), specific to the needs of MBUSI students.

AUM 248 Engine Performance, Diagnostics & Emissions 3 Hours

This is a new course that combines the competencies in AUM 244 (Engine Performance & Diagnostics) and AUM 246 (Automotive Emissions), specific to the needs of MBUSI students.

6. Program Completion Requirements:

- **Credit hours in institutional general academic curriculum**
 - **22**
- **Credit hours required in technical core**
 - **Automotive Technician and MBUSI Systems Skills Pathway - 24**
- **Credit hours for each option, concentration, specialization, track**
 - **MBUSI Systems Skills Pathway- 15**
 - **Automotive Technician Pathway- 21**
- **Total credit hours required for completion.**
 - **MBUSI Systems Skills Pathway- 61**
 - **Automotive Technician Pathway- 67**

Describe any additional requirements such as a comprehensive examination, practicum or internship, some of which may carry credit hours included in the list above.

- **AUM 291 and 293 Work-Based Learning 6 Hours**

These courses were added as a requirement for the MBUSI System Skills pathway. These hours will be completed at the Mercedes Plant in Vance, AL.
- **Student specialty area certifications are awarded by The National Institute for Automotive Service Excellence. (ASE Student Certification)**
- **ASE Student Certifications are available for each course within the proposed new instructional program.**
- **ASE credentials earned by students are included in the grading rubric for each course.**

7. If there is a recognized specialized accreditation agency for this program, please identify the agency and explain why you do or do not plan to seek accreditation. Indicate if graduation from an accredited program is a requirement to sit for a required licensure exam.

Program accreditation is awarded by The National Automotive Technician Education Foundation (NATEF). Shelton State Community College is prepared to conduct the NATEF Self-Evaluation-Step 1 of the accreditation process upon approval of new program application.

8. If passage of a licensure examination is required for employment in the proposed field, identify the examination and the administering body. Also, if a licensure examination is required, an objective relating to passage rates should be developed by the institution.

- **Licensure is not required for employment as an automotive technician.**

9. Identify specific Alabama senior institutions which will articulate the transfer of skills-emphasis credits for this program.

Although some of the courses offered in the proposed new instructional programs may transfer to a senior institution, the technical scope of the program will terminate at the AAS level. An exception would be an institution granting credit toward a Bachelor of Science in Education for work-experience earned as a practitioner in the field for the purposes of licensure as a technical instructor. e.g. Athens State University

D. Program Admissions Requirements, Enrollment Projections and Completion Projections

1. Describe briefly the criteria and screening process that will be used to select students for the program.

All students wishing to enroll in either the Automotive Technician or MBUSI Systems Skills pathway must meet the established admissions requirements to the college.

Additional selection criteria required for students to enter the MBUSI Systems Skills pathway are:

- **WorkKeys Assessment administered by SSCC**
- **Interview with MBUSI**
- **Hands-On Assessments administered by AIDT**
- **Physical/Drug Screen**
- **Background Check**

2. Describe the methodology for determining enrollment projections.

Enrollment projections were determined by input from the advisory committee and by surveys of local employers, current and former students. The results of the student surveys are attached in appendix B

3. Provide a realistic estimate of the costs of the program.

ESTIMATED NEW FUNDS REQUIRED TO SUPPORT PROPOSED PROGRAM						
	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
FACULTY	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$63,000</u>
LIBRARY	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
FACILITIES	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
EQUIPMENT	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
STAFF	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
OTHER	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
TOTAL	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$12,600</u>	<u>\$63,000</u>

SOURCES OF FUNDS AVAILABLE FOR PROGRAM SUPPORT						
	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
INTERNAL REALLOCATIONS	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
EXTRAMURAL*	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
TUITION	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$683,400</u>
TOTAL	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$136,680</u>	<u>\$683,400</u>

*Extramural funds from _____

ENROLLMENT AND DEGREE COMPLETION PROJECTIONS						
	Year 1	Year 2	Year 3	Year 4	Year 5	5-YEAR AVERAGE
TOTAL HEADCOUNT ENROLLMENT	<u>23</u>	<u>42</u>	<u>46</u>	<u>50</u>	<u>53</u>	<u>43</u>
NEW ENROLLMENT HEADCOUNT	<u>23</u>	<u>25</u>	<u>27</u>	<u>29</u>	<u>31</u>	<u>27</u>
DEGREE COMPLETION PROJECTIONS	<u>0</u>	<u>17</u>	<u>19</u>	<u>21</u>	<u>22</u>	4-YEAR AVERAGE <u>16</u>

E. Program Need Justification

1. Will the program satisfy a clearly documented need?

Due to growth and attrition, all sectors of the automotive industry, including dealerships, independent repair facilities, and OEMs, are experiencing an increased demand for technicians capable of diagnosing and repairing the complex systems installed in late model vehicles. MBUSI has a targeted need for technicians that are familiar with their product lines. (See attached letter.)

2. If the program duplicates or closely resembles another program already offered in the state, can this duplication be justified?

The proposed new instructional program closely resembles, and is modeled after, the AAS programs in Automotive Technology currently offered at Lawson State Community College, Bessemer Campus. The manufacturer partnerships at Lawson State are with Ford, General Motors and Toyota and are geared primarily toward service technicians in the dealership work environment. The MBUSI partnership is custom tailored to meet the needs of MBUSI in a manufacturing environment. The automotive technician program at Lawson State primarily serves the Birmingham metro area, the largest market in the state. Shelton State is situated in West Alabama and serves a need independent of the area served by Lawson State.

3. What characteristics of the identified need require that it be met by a new program rather than an existing program? (Note: In explaining how the proposed program meets this criterion, an institution may refer to the criterion on collaboration and develop a response that addresses both criteria simultaneously). For purpose of this criterion, duplication is defined as the same or similar six-digit CIP Code and award level in the Master Academic Inventory. Institutions should consult with Department of Postsecondary Education staff during the ISPA phase of application development to determine what existing programs are considered duplicative of the proposed program.

This is not a new program but an expansion of the current AUM Certificate program currently in place at Shelton State.

4. Based on your research on the employment market for graduates of this program, indicate the total projected job openings (including both growth and replacement demands) in your State Board of Education approved service area as well as the state at large. These job openings should represent positions that require graduates from a program such as the one proposed.

Projected Job Openings

The data in the table below is provided by the Alabama Department of Labor Market Information Division in cooperation with the Projections Managing Partnership and the U.S. Department of Labor Statistics. It includes combined growth and replacement data for SOC 49-3023 (Automotive Service Technicians and Mechanics) and 51-2092 (Team Assemblers).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
College Service Area	144	168	192	216	240	960
State	852	994	1136	1278	1420	5680

5. Give a brief description of the methodology used to determine the projected job openings (such variables as (a) assurance of adequate employer surveys, (b) business/industry markets, and (c) response rate. Cite all relevant sources. Whenever possible, Alabama Department of Industrial Relations employment data/projections should be utilized. If a survey of employment needs was used attach a copy of the survey instrument with a **summary** of results as **APPENDIX C. Do not submit copies of the individual survey responses.**

According to the Bureau of Labor Statistics, employment of automotive service technicians and mechanics is projected to grow 9 percent from 2012 to 2022, about as fast as the average for all occupations.

As the number of vehicles in use continues to rise, more entry-level service technicians will be needed to do basic maintenance and repair such as replacing brake pads and changing oil. The increasing lifespan of late-model cars and light trucks will further increase demand for qualified workers.

With some employers reporting difficulty finding workers with the right skills and education, job opportunities for qualified applicants should be very good. Job seekers who have completed formal postsecondary training programs—especially candidates with training in advanced automotive technology such as hybrid fuel or computer systems—should enjoy the best job prospects.

Those without formal automotive training are likely to face strong competition for entry-level jobs.

More numerous openings will be in automobile dealerships and independent repair shops where most service technicians currently work.

6. If the program is primarily intended to meet needs other than employment needs, present a brief rationale.

The proposed new instructional program is designed to meet the needs of employers in Workforce Development Region 3.

7. If similar programs are available at other institutions in the state, will any type of program collaboration be utilized? Why or why not? What specific efforts have been made to collaborate with institutions to meet the need for this program? Address qualitative, cost, and access considerations of any collaborations that were considered.

While the proposed new instructional program closely resembles a program in another service area, no collaborations are planned at this time.

8. Will any type of distance education technology be utilized in the delivery of the program on your main campus or to remote sites? If not, why?

Some of the academic course requirements of the program can be taken through online course delivery methods.

9. Address the quality, access and cost considerations of using distance technology in the program.

Regardless of the course delivery method, the quality of teaching and learning in the online environment at Shelton State is equivalent to traditional classroom courses taught on campus. Students enrolled in distance learning courses achieve the same learning goals, objectives, and competencies as described in the Alabama Community College System's course directory.

There are no additional tuition costs associated with enrollment in online classes at Shelton State. Students can access the College's online course delivery system anywhere an internet connection is available.

F. Program Resource Requirements

1. Number of currently employed faculty who teach in the program:

Full-time 2 Part-time 0

2. Number of additional faculty who will be employed to teach in the program during the first five years:

Full-time 0 Part-time 1

3. If the qualifications of new faculty to be hired differ from requirements stated in Postsecondary Faculty Credentials, indicate such.

- **All faculty members hired in the proposed new instructional program will maintain current ASE Certifications in the automotive specialty area for the courses they teach (A-1 through A-9).**
- **All instructors will maintain current ASE certification in Maintenance & Light Repair (G1).**
- **Instructors that teach courses in Engine Performance will maintain current ASE Certification as an Advanced Engine Performance Specialist (L1).**

3. Briefly describe available and additional support staff who will be provided for the program.

No additional staff will be required for the proposed new instructional program.

5. Describe any special equipment that is necessary for this program, indicating what is currently available, what will be added, and the cost of additional equipment.

All of the equipment required for the proposed new instructional program is currently on hand.

6. Describe facilities for the program, indicating what is currently available and any necessary renovations or additional facilities that would be added. Provide a cost estimate for any renovation or additions. If clinical sites are required, provide signed agreements between the institution and the host facility. At a minimum, the total number of slots should equal the projected number of students cited above.

The facilities on the campus of Shelton State Community College are adequate to meet the objectives of the proposed new instructional program at no additional costs. The current AUM Certificate program has up-to-date equipment that will be utilized in the new program. This includes a new Hunter alignment system, a Hunter wheel balancing system, a Pro-Cut on-vehicle brake lathe, A-Tech electronic troubleshooting simulators, Snap-On electrical certification systems, Snap-On torque certification systems, four late-model Mercedes-Benz SUVs, and Snap-On diagnostic system trainers. The agreements for the work based learning component of the MBUSI partnership are currently under development.

6. Provide an indication of the current status of the library collections supporting the proposed program. Describe how any deficiencies will be remedied, including the cost of such remedies.

Shelton State Community College library provides a wide range of resources that can be accessed on or off campus. The *Alabama Virtual Library* provides students and faculty with access to numerous databases from which they can access thousands of full-text journal articles specific to technology. Library staff is available to assist students as needed.

G. Costs and Financial Support of the Program

1. This should only include the **additional** costs that will be incurred, not current costs. All sources and amounts of funds for program support should be indicated.

The only additional costs for adding this new program is the salary for an adjunct instructor. It is estimated that this cost over a five-year period will be approximately \$63,000.

Additional support funds will be provided through the increase in tuition dollars received. This new program includes an additional 34 credit hours resulting in an increase in revenue of \$683,400 in tuition over a five-year period.

APPENDIX A

Academic Requirements			
ORI	101	Orientation to College	1
ENG	101	English Composition	3
CIS	146	Microcomputer Applications	3
MTH	100	College Algebra	3
SPH	107	Fundamentals of Public Speaking	3
DDT	104	Basic CAD	3
PSY	276	Human Relations	3
Fine Art		Fine Art or Humanities Elective	3
Academic Total			22
Core			
AUM	101	Fundamentals of Automotive Technology	3
AUM	112	Electrical Fundamentals	3
AUM	124	Automotive Engines	3
AUM	162	Electrical Electronic Systems	3
AUM	239	Engine Performance	3
AUM	127	Braking/Steering & Suspension Systems	3
AUM	212	Advanced Electrical/Electronic Systems	3
AUM	133	Heating Ventilation & Air Conditioning	3
Core Total			24
MBUSI Systems Skills Pathway Requirements			
AUM	127	Automotive Braking & Steering/Steering and Suspension Systems	3
AUM	291	Work Based Learning	3
AUM	293	Work Based Learning	3
AUM	235	Automatic Transmissions Drive Trains & Axles	3
AUM	248	Engine Performance, Diagnostics and Emissions	3
Pathway Total			15
Degree Total			61
Automotive Mechanics Pathway Requirements			
AUM	121	Braking Systems	3
AUM	122	Steering and Suspension	3
AUM	220	Advanced Automotive Engines	3
AUM	224	Manual Transmission and Trans Axle	3
AUM	230	Automatic Transmission and Trans Axle	3
AUM	244	Engine Performance & Diagnostics	3
AUM	246	Automotive Emissions	3
Pathway Total			21
Degree Total			67

APPENDIX B (summary of student survey results)

APPENDIX C (copy of survey instrument with a summary of results)

APPENDIX D

G-1 Attach a synopsis of the qualifications (degrees, **experience**, etc.) of each existing faculty member to proposal as **APPENDIX D**. Do not attach entire curriculum vitae. This should be no more than **one paragraph per faculty**.

Michael Hobson

Associate of Applied Technology
Automotive Service Technology
Bessemer State Technical College, 1990

Bachelor of Science in Education
Technical Education
Athens State College, 1994

ASE Certifications (Valid through 2020)
G1, Maintenance & Light Repair
A1-A8, Master Automobile Technician
A9, Light Vehicle Diesel Engines
L1, Advanced Engine Performance Specialist

Brian Sanford

Associate of Applied Technology
Automotive Service Technology
Bessemer State Technical College, 2001